



Engineering Industry Sector Guide

Content

Overview of the Engineering Sector

[Page 3](#)

Who are the major employers?

[Page 4](#)

Skills, Qualifications & Training

[Page 7](#)

News & Trends

[Page 9](#)

CTP RightJob Vacancies

[Page 12](#)

Useful Links

[Page 13](#)

Sector Guide – Overview of the Engineering Sector

Nearly 5.7 million employees work in engineering enterprises in the UK, representing just over 19% of total UK employment in all registered enterprises. As a proportion of total employment, this has remained relatively consistent for the last three years.

It has been forecast that engineering employers will need to recruit 265,000 skilled entrants annually to meet demand for engineering enterprises through to 2024, this figure has increased drastically from last year's forecast of 182,00.

It is estimated that engineering contributed £486 billion to UK GDP in 2015 – around 26% of the total and representing 2.3% growth since 2014. Source:
<https://www.engineeringuk.com/research/engineering-uk-report/>

Average salaries have increased in all of the separate sectors covered by the survey, however the renewables and nuclear sectors have seen the most marked uplift (£58,695) and have taken the top spot for the first time in the survey's history, an indication that engineers working in these sectors are becoming increasingly critical to the UK economy.

The Engineer Salary Survey 2021 –. The average salary for all engineers in 20 is £56,807, an increase of 10% on last year's average of £51,253, although this may be partly the result of a smaller survey size.

The full survey results can and report be viewed here: <https://www.theengineer.co.uk/theengineer-salary-survey-2021/>

Who are the major employers?



SIEMENS

THALES



CAF

AIRBUS



Who are the major employers?



Jaguar Land Rover JLR work closely with CTP to promote vacancies to Service Leavers and regularly attend events. JLR are seeking staff within product development which includes research, engineering, project management, quality and design. There are also engineering and supervisory roles in developing and manufacturing the motor engines, as well as various skilled trade roles, quality, logistics and engineering in the manufacture of the whole car.



Mitie Foundation CTP is a Referral Partner for Mitie Foundation and as such any applicant for a role advertised by Mitie can benefit from that relationship.

You should be aware of the questions on any application made to Mitie vacancies via their direct website. On every application the following questions are mandatory –

- Were you referred through a Foundation partner
- Did you complete a Foundation programme (R2W/BCD/Beyond bars)

From these questions the Foundation are able to identify who has clicked “Yes” and ensure their applications are listed as Foundation candidates. It is easy for them to identify which candidates have completed a programme, but not who has been referred by CTP/RightJob to roles. Therefore use of RightJob for recording of applications is ideal so long as the applicant also ticks the ‘Referral Partner’ box on their application.

DE&S We are a highly specialised part of the Ministry of Defence. We employ over 11,500 talented civil servants, military personnel and private contractors

From the procurement of clothes to carriers, food to fighter jets, we ensure our UK military customers – the Royal Navy, the British Army and the Royal Air Force – have the equipment and support they need to carry out their duties effectively.

We also manage the recruitment for our sister organisation – the Submarine Delivery Agency.



Ministry
of Defence

de&s



Airbus directly employs 13,000 staff in the UK and many more through the supply chain. Airbus Wing Work employs staff at Filton working on the design, engineering and support of Airbus wings, fuel systems and landing gear. Assembly takes place at the Broughton site which recruits for manufacturing and engineering roles.

<https://www.airbus.com/careers.html>



Boeing is a major manufacturer of commercial jetliners. Boeing Defence, Space and Security produce communication systems for military and government customers. Boeing directly employs 1700 staff throughout the UK, along with many more subcontractor staff. Boeing recruit for a wide variety of roles including design, planning, and service engineers, systems engineers, quality and project managers.

<https://jobs.boeing.com/>



GKN Aerospace employs around 12,000 staff and their Bristol site produces parts for both Airbus and Boeing. They also operate sites in Portsmouth, Isle of Wight and Yeovil. <http://www.gkn.com/aerospace/careers/Pages/default.aspx>



Rolls Royce employs 16,000 staff in the UK, manufacturing engines for the civil and defence market and the growing nuclear business. Rolls Royce recruit engineers from all disciplines of electrical, electronic, instrumentation and sensor engineering to specify, design, develop, test and support control, instrumentation and protection systems and equipment. <http://www.rolls-royce.com/careers.aspx>



BAE Systems design and manufacture fixed wing combat and training aircraft for the UK and overseas defence market, and are currently working on the Typhoon fleet. They have ongoing recruitment requirements across sites, mainly in Warton, and RAF Conningsby for engineers across a range of disciplines <https://www.ctp.org.uk/job-finding/directory/bae-systems>

Skills, Qualifications & Training

Skills and Qualifications

Many Service leavers seeking employment within engineering will have completed an engineering apprenticeship or have some form of relevant experience gained through the Armed Forces. This experience is often accredited and most Service leavers will have a civilian recognised qualification. The IET and IMECHE (see below) will assist Service personnel in identifying how their experience relates to civilian qualifications and work towards professional recognition awards.

There are opportunities for Service leavers without an engineering background to enter the industry, through an apprenticeship scheme with an Employer, through a local college, or alternatively through short resettlement courses which provide recognised civilian qualifications. For those without industry experience, it is always recommended that a period of work attachment be completed with a potential employer, in order to put into practice the skills gained during training.

Organisations who can assist with identifying training routes and professional recognition include:

IET <https://www.engineeringuk.com/research/engineering-uk-report/>

The Institution of Engineering and Technology provide advice and guidance to those in the industry and those considering a career within engineering. The IET have a membership scheme and Service personnel can be advised on career progression as well as relevant qualifications and professional recognition in the industry.

IMechE <http://www.imeche.org/membership-registration/become-a-member/armed-forces-and-mod>

The Institution of Mechanical Engineers host workshops, seminars and various events throughout the UK and also offer a membership scheme with professional recognition routes to become an Engineering Technician or Incorporated or Chartered Engineer.

SoE <http://www.soe.org.uk/join-soe/case-studies/engineers-in-the-armed-forces/>

Society of Operations Engineers (SOE) represents over 3,000 individuals employed within the Armed Forces. They Support engineering professionals and provide training programmes across the Army, RAF and Royal Navy

Skills, Qualifications & Training

Training

A Craftsperson or Advanced Craftsperson

Will normally have completed an engineering apprenticeship and will undertake day to day semi-skilled maintenance activities. Individuals would have training in electrical or mechanical crafts, control and instrumentation or plant and process.

This is likely to include an Engineering Technician / Leading Engineering Technician / Marine Engineering Mechanic from the Royal Navy; Aircraft Technician/SAC/Weapon Technician or General Technician/Cpl from the RAF or Lance Corporal/Craftsman REME/Sapper from the Army.

An Engineer

Will generally have an HND or Foundation Degree in an Engineering discipline, and a Health and Safety qualification such as IOSH.

The engineer will be responsible for engineering maintenance and may be a technical specialist. They would be responsible for day to day maintenance and also overhauls, projects and modifications. They would be a logical / analytical thinker with problem solving skills, and may have some finance or budget responsibilities.

This is likely to include Chief Petty Officer /Warrant Officer Engineering Technicians from the Royal Navy; Chief Technician / Flight Sergeant /Warrant Officer from the RAF or a Staff Sergeant or Warrant Officer from the Army.

An Engineering Manager

Will often have an Engineering Degree, a substantial Health and Safety qualification such as NEBOSH and a Business Management qualification.

CTP Training

Below is a selection of the many courses that CTP has to offer for this industry, please contact your career Consultant or the Central Booking and Information Centre for more information.

CIV 02894 456200 or Mil: 9491 56200

Email: coursebookings@ctp.org.uk

Engineering Based Courses

For a full list please follow the link <https://www.ctp.org.uk/resettlement-training/>

- [Domestic Electrical Installation Full Scope](#)
- [IEE 18th Edition Wiring Regulations](#)
- [Level 3 Award in Inspection and Testing](#) – 8 days
- [L3 Diploma in Gas Utilisation and ACS Assessments Phase](#) - 35 Days + work attachment
- [Programmable Logic Controllers](#)
- [Air Conditioning & Refrigeration Technology](#)



CTP also offer a range of related training courses relevant to certain Engineering Management positions:

- [Prince 2](#) – 5 days
- [APM Project Management](#) – 10 days
- [NEBOSH General Certificate](#) – 15 days
- [NEBOSH Environmental Management](#) – 6 days
- [Lean Six Sigma \(Green Belt Foundation\)](#)- 5 days
- [Finance for non-Financial Managers](#)- 2 days
- [Potential Facilities Manager](#)- 10 days
- [IWFM Facilities Management L4 Award](#)- 5 days

There are several CTP Preferred Suppliers who also offer relevant training for those considering trades such as HVAC, Plumbing, Gas and Electrical. Other suppliers may provide training towards a career in renewables, railway, signalling, locksmiths, marine engineering and oil and gas. <http://www.ctp.org.uk/preferred-suppliers>

COVID – 19 Virtual Training Option

Virtual Classrooms Becoming A Reality!



During this COVID – 19 Pandemic, CTP have been working hard to ensure that Service leavers can access resettlement services in the safest possible way and we have introduced Virtual Classrooms to some of our existing Vocational Training courses.

A course delivered in a Virtual Classroom is where learners log into an online platform, from their home or safe location and they can see and interact with a live trainer who is delivering the course in the same way as it would be in the classroom. End of course examinations are taken online and learners will be required to have a webcam, microphone and speaker/headset in order to interact fully.

Those who have already booked places on our face to face courses between now and 30 April have been offered the opportunity to switch onto our Virtual Classroom courses, and we will be opening up bookings for our May courses shortly. For further information on courses and start dates please visit our website <https://www.ctp.org.uk/resettlement-training/find-a-course?department=general-management>

To book your place please contact CBIC on 01252 954007
Please read through our **Frequently Asked Questions** which answers many of your queries regarding training during the current COVID -19 situation

New Vocational Training course dates to September 2022 are available on our website!

CTP are pleased to advise that our vocational training course dates are now available for booking for courses commencing up to September 2021!

We have added additional availability to our most high demand courses, and continue to offer a range of highly subsidised contract funded training, providing excellent value for money.

Course dates, locations and prices can be found on our website, along with detailed descriptions and downloadable factsheets.

To make a booking for any of our courses, please call our Course Bookings & Information Centre CBIC on 01252 954007.

News and Trends

Surrey to evaluate weld integrity of fusion plant steel

Materials engineers at Surrey University are gathering data and developing a simulation model to prove whether welds are safe and effective to use in future fusion energy plants.

“Thin shell” floors could cut carbon in construction

The ‘thin shell’ vaulted floor was developed by a team of structural engineers, mathematicians and manufacturing experts at the Universities of Bath, Cambridge and Dundee. Compared with a traditional flat slab floor, the innovation is said to use 75 per cent less concrete and 60 per cent less carbon in its construction.

Babcock and Plymouth Science Park launch additive manufacturing lab

Aerospace, defence and security giant Babcock International has joined forces with Plymouth Science Park to launch a state-of-the-art additive manufacturing (AM) centre that will enable the company to address obsolescence and supply chain issues by directly printing metal parts.

McLaren revs up for inaugural Extreme E

McLaren is set to make its debut in Extreme E, the e-racing series that starts in Neom, Saudi Arabia in the Desert leg of a race calendar that will take place on four more off-road race tracks – Island, Ocean, Copper, and Energy – that are designed to push each team’s 1780kg Odyssey 21 vehicle to its limits, and also to highlight the impacts of climate change on the terrain which they race.

Airbus and CFM to demonstrate hydrogen combustion on an A380

According to Airbus, the programme will ground and flight test a direct combustion engine fuelled by hydrogen, in preparation for entry-into-service by 2035. The demonstration will use an A380 flying testbed equipped with liquid hydrogen tanks prepared at Airbus facilities in France and Germany.

Gravitricity awarded grant for 4MWh storage solution

The Edinburgh-based energy storage specialists will work with Industrial Systems and Control (ISC), winch specialists Huisman and Careys Civil Engineering to deliver the front-end engineering design (FEED) for a 4MWh, multi-weight system using a custom-built shaft.



To view all live vacancies in this sector, first login to your right job account at www.ctp.org.uk

For All Engineering vacancies, then click this link [Engineering Vacancies](#)

The below links for specific roles:

For Engineering [Domestic](#)

For Engineering [Electrical](#)

For Engineering [Electronics](#)

For Engineering [Mechanical](#)

For Engineering [Nuclear](#)

For Engineering [Civil](#)

Useful Links

<http://www.theengineer.co.uk>

<http://www.energyvoice.com>

<http://www.engineeringuk.com>

<http://www.ecia.co.uk>

<http://careers.ecitb.org.uk>

<https://www.ctp.org.uk/job-finding/directory>

<https://nationalcareers.service.gov.uk/job-categories/engineering-and-maintenance>